II. Listing of the Claims

This listing of the claims replaces all prior versions and listings of the claims in this application:

1. (Previously cancelled)

2. (Previously cancelled)

3. (Previously cancelled)

4. (Currently amended) An Internet connection system, comprising:

a relay device connected to a client device and provided in a first network, the first network communicated in a first protocol; and

a server connected to the relay device through a second network in a second protocol, the second network being the Internet,

wherein the relay device comprises:

a client device global address storage section for storing a global address of the client device in the first protocol;

a server address storage section for storing a global address of the server in the second protocol;

a first routing device for routing a connection from the client device through the server based on the global address of the server stored in the server address storage section; and

a first packet processing device for capsulating/decapsulating packets, the packets being in the first protocol, using the second protocol to thereby establish a tunneling connection with the server in the first protocol,

and wherein the server comprises:

a Web server device for receiving a selection of the client device and an instruction for controlling the client device from a user via the Internet,

a second packet processing device for capsulating/decapsulating packets, the packets being in the first protocol, using the second protocol to thereby establish a tunneling connection with the relay device;

a client device global address management device for managing the global address of the client device in the first protocol, the client device connected to the relay device, in association with a global address of the relay device in the second protocol;

a second routing device for routing a connection to the relay device based on the global address of the client device managed by the client device global address management device; [[and]]

a model identification section for determining if the client device is of a predetermined manufacturer model ~~and/~~or the relay device is of a predetermined manufacturer model; and

a client device control section for receiving the selection of the client device and the instruction from the Web server device, receiving the manufacturer model of the client device or the relay device determined in the model identification section, and sending a packet including a command to the client device based on the instruction and the manufacturer model.

5. (Previously presented) The Internet connection system of Claim 4, wherein

the server further comprises a communication session disconnection section for disconnecting communication sessions or halting transmissions of packets that the server receives if the model identification section determines that the client device or the relay device is not of the predetermined manufacturer model.

6. (Currently amended) The Internet connection system of Claim 4, wherein

the server further comprises a command conversion section for converting said instruction received from the user at the Web server device to a command to be sent to the client device ~~to a command~~ in a predetermined manufacturer model specific format to control the client device

based on ~~results from~~ the manufacturer model determined by the model identification section.

7. (Cancelled)

8. (Previously presented) An Internet connection system of Claim 4, further comprising:

a network type identification section for determining if an environment of the first network connected with the client device and/or the relay device is of a predetermined network environment type.

9. (Previously presented) The Internet connection system of Claim 8, wherein

the server further comprises a communication session disconnection section for disconnecting communication sessions or halting transmissions of packets that the server receives if a private network environment connected with the client device or the relay device is determined to be not of the predetermined network environment type.

10. (Original) The Internet connection system of Claim 9, wherein

the server further comprises a state information obtaining section for obtaining at least one of an operation state, a usage state, and location information of the client device and/or the relay device.

11. (Previously presented) The Internet connection system of Claim 10, wherein

the state information obtaining section obtains at least one of the operation state, the usage state, and the location information of the client device using a method according to a manufacturer model of the client device.

12. (Original) The Internet connection system of Claim 10, wherein

the server further comprises a search section for searching for the client device or the relay device based on at least one of the global address, the operation state, the usage state, and the location information of the client device or the relay device.

13. (Previously presented) The Internet connection system of Claim 12, wherein

the search section comprises a means for displaying a list of the client devices connected to each of the relay devices.

14. (Original) The Internet connection system of Claim 13, wherein

the server further comprises a client device control section for controlling the client device, which selects a specific client device from the list to thereby activate a control program for the specific client device.

15. (Previously cancelled)

16. (Previously cancelled)

17. (Previously cancelled)

18. (Previously cancelled)

19. (Previously cancelled)

20. (Previously cancelled)

21. (Currently amended) An Internet connection system, comprising:

a relay device connected to a client device and provided in a first network, the first network communicated in a first protocol; and

a server connected to the relay device through a second network in a second protocol, the second protocol being the Internet,

wherein the relay device comprises:

a client device global address storage section for storing a global address of the client device in the first protocol;

a server address storage section for storing a global address of the server in the second protocol;

a first routing device for routing a connection from the client device through the server based on the global address of the server stored in the server address storage section; and

a first packet processing device for capsulating/decapsulating packets, the packets being in the first protocol, using the second protocol to thereby establish a tunneling connection with the server in the first protocol,

and wherein the server comprises:

a Web server device for receiving a selection of the client device and an instruction for controlling the client device from a user via the Internet,

a second packet processing device for capsulating/decapsulating packets, the packets being in the first protocol, using the second protocol to thereby establish a tunneling connection with the relay device;

a client device global address management device for managing the global address of the client device in the first protocol, the client device connected to the relay device, in association with a global address of the relay device in the second protocol; [[and]]

a second routing device for routing a connection to the relay device based on the global

address of the client device managed by the client device global address management device; and

a client device control section for receiving the selection of the client device and the instruction from the Web server device, and sending a packet including a command to the client device based on the instruction and a manufacturer model of the client device, and

wherein the relay device further comprises a model identification section for determining if the client device is of a predetermined manufacturer model.

22. (Previously presented) The Internet connection system of Claim 21, wherein

the relay device further comprises a communication session disconnection section for disconnecting communication sessions if the model identification section determines that the client device is not of the predetermined manufacturer model.

23. (Previously cancelled)

24. (Previously cancelled)

25. (Currently amended) A server, used in an Internet connection system which comprises: a relay device provided in a first network; and the server connected to a client device through the relay device and the Internet, the client device connected to the first network, comprising:

a client device address management device for managing an address of the client device connected to the relay device in association with an address of the relay device;

a routing device for routing a connection, the connection from the Internet to the client device, to the relay device connected to the client device based on the address of the client device managed at the client device address management device;

a Web server device for receiving a selection of the client device and an instruction for controlling the client device from a user via the Internet;

a model identification section for determining if the selected client device is of a predetermined manufacturer model ~~and/~~or the relay device is of a predetermined manufacturer model; and

a command conversion section for converting said instruction received from the user at the Web server device to a command to be sent to the client device ~~a command~~ in a predetermined manufacturer model specific format to control the client device based on ~~results from~~ the manufacturer model determined by the model identification section.

26. (Previously presented) The server of Claim 25, further comprising:

a communication session disconnection section for disconnecting communication sessions or halting transmissions of packets that the server receives if the model identification section determines that the client device or the relay device is not of the predetermined manufacturer model.

27. (Original) The server of Claim 25, wherein

the client device includes a peripheral device which is communicable with the relay device but cannot by itself connect to the Internet.

28. (Previously presented) The server of Claim 25, further comprising:

a network type identification section for determining if an environment of the first network connected with the client device and/or the relay device is of a predetermined network environment type.

29. (Previously presented) The server of Claim 28, further comprising:

a communication session disconnection section for disconnecting communication sessions or halting transmissions of packets that the server receives if an environment of said first network

connected to the client device or the relay device is determined not of the predetermined network environment type.

30. (Original) The server of Claim 25, further comprising:

a state information obtaining section for obtaining at least one of an operation state, a usage state, and location information of the client device and/or the relay device.

31. (Previously presented) The server of Claim 30, wherein

the state information obtaining section obtains at least one of the operation state, the usage state, and the location information of the client device using a method according to a manufacturer model of the client device.

32. (Original) The server of Claim 30, further comprising:

a client device control section for controlling the client device, wherein

the client device control section comprises a means for displaying to a user at least one of the operation state, the usage state, and the location information of the client device.

33. (Original) The server of Claim 30, further comprising:

a search section for searching for the client device or the relay device based on at least one of the address, the operation state, the usage state, and the location information of the client device or the relay device.

34. (Original) The server of Claim 33, wherein

the search section comprises a means for displaying a list of the client devices found by the search section, each with the operation state.

35. (Original) The server of Claim 34, wherein

the means displays a list of the client devices connected to each of the relay devices.

36. (Original) The server of Claim 34, further comprising:

a client device control section for controlling the client device, wherein

the client device control section selects a specific client device from the list to thereby activate a control program for the specific client device.

37. (Original) The server of Claim 25, wherein

the relay device is provided in the client device.

38. (Previously presented) The server of Claim 25, further comprising:

a packet processing device for capsulating/decapsulating packets, the packets being in a first protocol, using a second protocol to thereby establish a tunneling connection with the relay device;

wherein said client device address management device manages a global address of the client device in the first protocol, the client device connected to the relay device, in association with a global address of the relay device in the second protocol; and

said routing device routes a connection to the relay device based on the global address of the client device managed by the client device address management device.

39. (Original) The server of Claim 38, wherein

the first and second protocols are different.

40. (Original) The server of Claim 38, wherein

the first and second protocols are the same.

41. (Original) The server of Claim 38, further comprising:

a client device address search section for searching for the global address of the client device in the first protocol based on a connection request to the client device.

42. (Original) The server of Claim 41, further comprising:

a connection requester authentication section for authenticating a user who requested a connection to the client device to thereby permit or deny the connection to the client device.

43. (Original) The server of Claim 38, further comprising:

a tunneling connection information management device for managing information of the tunneling connection between the relay device and the server, wherein

the tunneling connection information management device sends a notification to the relay device of the global address of the server in the second protocol, and obtains the global address of the relay device in the second protocol and an entirety or part of the global address of the client device in the first protocol.

44. (Original) The server of Claim 43, wherein

the tunneling connection information management device authenticates the relay device to obtain an authentication result, and, if the authentication result is positive, sends the notification.

45. (Original) The server of Claim 38, further comprising:

a filtering processing device for filtering communications to/from the client device according to predetermined rules.

46. (Original) The server of Claim 45, further comprising:

a filtering rule setup section for providing an interface for editing the predetermined rules.